DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006134 Address: 333 Burma Road **Date Inspected:** 21-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Yu Dongping / Zhang Zhineng / LCIMI Picesentagfei Yes No

Inspected CWI report: Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Weld Procedures Followed: Electrode to specification:** Yes No Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No

Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** TOWER COMPONENTS

Summary of Items Observed:

On this date, the Caltrans OSM Quality Assurance (QA) Inspector, "Victor" KS Narayan was present during the times noted above for observations relative to work performed.

Bay 11 – TOWER ASSEMBLY:

I. Lift 3 – Skin Plates' butt welding:

Weld process, SAW of butt weld joints located on PCMK: Lift 3-East Tower Skin "B" plate butt welds. The weld designation numbers and the welder was identified as follows.

ESD1-FBSA3-2A/C-9A, 12A (CJP), 10, 14 (PJP): The welder was identified as Li Xiaoqing and the welder number was identified as 044560.

ESD1-FBSA3-2A/C-22A, 16A (CJP), 19, 14 (PJP): The welder was identified as Qin Xiulan and the welder number was identified as 044550.

ESD1-FBSA3-2A/C-23 (PJP): The welder was identified as Xia Wenying and the welder number was identified as 044558.

ESD1-FCSA3-2B/C-47A (PJP): The welder was identified as Zou Xiaohua and the welder number was identified as 207463.

The ZPMC CWIs were identified as Li Lin & Zhang Zhineng and the ABF representatives were identified as Zhang Jicai & Wang Chenjun. The welding variables recorded by QC appeared to comply with applicable WPS, WPS-B-T-2221-B-P3-S-Z for PJP weld joints & WPS-B-T-2221-B-U3C-S-Z for CJP weld joints.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

II. Base shear plate stiffeners' welding:

Weld process, FCAW of PJP weld joints located on PCMK: Stiffener plates on BASE SHEAR PLATE of EAST TOWER. The weld designation numbers and the welders were identified as follows.

ED1-A29A/B-78: The welder was identified as Xu Hua and the welder number was identified as 049220.

ED1-A29A/B-79: The welder was identified as Li Haidong and the welder number was identified as 047701.

ED1-A29A/B-82: The welder was identified as Ma Yusheng and the welder number was identified as 040759.

ED1-A29A/B-83: The welder was identified as Wang Daping and the welder number was identified as 040736.

ED1-A29A/B-84: The welder was identified as Liu Jun and the welder number was identified as 202821.

ED1-A29A/B-85: The welder was identified as Li Zhaoqian and the welder number was identified as 048810.

The ZPMC CWI was identified as Li Hongfei and the ABF representative was identified as Be Dewei. The welding variables recorded by QC appeared to comply with applicable WPS, WPS-B-T-2332-Tc-P5-F.

VISUAL TESTING:

Bay 11 – Tower Assembly:

This QA Inspector performed 100% VT (Visual Inspection/Testing) of area previously tested by ZPMC QC personnel. The member was identified as Lift 2 – East Tower (inside) 80.75 m - Fit lug to Skin C/D/E & Diaphragm to Skin D PJP weld joints.

The weld designation numbers are as follows.

Fit Lug to Skin "C":

C2 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-22

C2 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-54

C3 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-25

C3 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-26

C4 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-28

C4 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-27

Fit Lug to Skin "D":

D1 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-34

D1 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-35

D2 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-39

D2 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-38

D3 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-40

D3 to 80.75 m - Lug to Diaphragm - ESD1-TL7J/L-41

D4 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-42

D4 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-43

Fit Lug to Skin "E":

E1 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-50

E1 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-51

E2 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-48

E2 to 80.75 m - Lug to Diaphragm - ESD1-TL7J/L-49

E4 to 80.75 m – Lug to Stiffener – ESD1-TL7J/L-44

E4 to 80.75 m – Lug to Diaphragm – ESD1-TL7J/L-45

Diaphragm to Skin "D":

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

ESD1-JL7J/L-36 ESD1-JL7J/L-37

Unless otherwise noted, all observations on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod (134-825-70045), who represents the Office of Structural Materials for your project.

Inspected By:	Narayan, Victor	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer